

# UTILITY PATENT APPLICATION TRANSMITTAL (Large Entity)

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Docket No.  
15436.103.1

Total Pages in this Submission  
4



## TO THE COMMISSIONER FOR PATENTS

Mail Stop Patent Application  
P.O. Box 1450  
Alexandria, VA 22313-1450

Transmitted herewith for filing under 35 U.S.C. 111(a) and 37 C.F.R. 1.53(b) is a new utility patent application for an invention entitled:

**PLUG-IN MODULE FOR PROVIDING BI-DIRECTIONAL DATA TRANSMISSION**

and invented by:

Yonglin Huang  
Qi Deng  
Robert Huang  
Liren Du  
Stephen Wang

This application is a continuation-in-part application of United States Patent Application Serial No. \_\_\_\_\_, which was filed on July 10, 2003 and entitled "Single-Fiber Bi-Directional Transceiver", which claims priority to and the benefit of U.S. Provisional Patent Applications No. 60/394,774, filed July 10, 2002 and entitled "Single-Fiber Bi-Directional Transceiver"; No. 60/397,969, filed July 23, 2002, entitled "Plug-in Module Having a Receptacle for Receiving Bi-Directional Data Transmission"; No. 60/397,971, filed July 23, 2002, entitled "Plug-in Module Having a Receptacle for Receiving Bi-Directional Data Transmission"; No. 60/397,967, filed July 23, 2002, entitled, "Optical Circulator Using a Prism for Bi-Directional Communication"; No. 60/398,056, filed July 23, 2002, entitled, "Low Cost Optical Circulator for Bi-Directional Communication"; No. 60/397,851, filed July 23, 2002, entitled, "Optical Circulator with Dual Receive Path for Bi-Directional Communication"; No. 60/397,728, filed July 23, 2002, entitled, "Optical Circulator with Dual Receive Path and Quarter Wave-Plate for Bi-Directional Communication"; No. 60/397,970, filed July 23, 2002, entitled, "Optical Circulator with Adjacent Transmit and Receive Ports for Bi-Directional Communication"; No. 60/397,852, filed July 23, 2002, entitled, "Optical Circulator with Beam Displacer for Bi-Directional Communication"; No. 60/397,963, filed July 23, 2002, entitled, "Optical Circulator with Dual Beam Displacers for Bi-Directional Communication"; and No. 60/395,413, filed July 13, 2002, entitled "Optical Pump Module".

Enclosed are:

### Application Elements

1. ☐ Filing fee as calculated and transmitted as described below
2. ☒ Specification having 48 pages and including the following:
  - a. ☒ Descriptive Title of the Invention
  - b. ☒ Cross References to Related Applications (if applicable)
  - c. ☐ Statement Regarding Federally-sponsored Research/Development (if applicable)
  - d. ☐ Reference to Sequence Listing, a Table, or a Computer Program Listing Appendix
  - e. ☒ Background of the Invention
  - f. ☒ Brief Summary of the Invention
  - g. ☒ Brief Description of the Drawings (if filed)
  - h. ☒ Detailed Description
  - i. ☒ Claim(s) as Classified Below
  - j. ☒ Abstract of the Disclosure



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**Application Elements (Continued)**

3. ☒ Drawing(s) *(when necessary as prescribed by 35 USC 113)*
- a. ☒ Formal                      Number of Sheets 11
- b. ☐ Informal                      Number of Sheets \_\_\_\_\_
4. ☐ Oath or Declaration
- a. ☐ Newly executed *(original or copy)*                      ☐ Unexecuted
- b. ☐ Copy from a prior application (37 CFR 1.63(d)) *(for continuation/divisional application only)*
- c. ☐ With Power of Attorney                      ☐ Without Power of Attorney
- d. ☐ DELETION OF INVENTOR(S)  
Signed statement attached deleting inventor(s) named in the prior application,  
see 37 C.F.R. 1.63(d)(2) and 1.33(b).
5. ☐ Incorporation By Reference *(usable if Box 4b is checked)*  
The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under  
Box 4b, is considered as being part of the disclosure of the accompanying application and is hereby  
incorporated by reference therein.
6. ☐ CD ROM or CD-R in duplicate, large table or Computer Program (Appendix)
7. ☐ Application Data Sheet (See 37 CFR 1.76)
8. ☐ Nucleotide and/or Amino Acid Sequence Submission *(if applicable, all must be included)*
- a. ☐ Computer Readable Form (CRF)
- b. ☐ Specification Sequence Listing on:
- i. ☐ CD-ROM or CD-R (2 copies); or
- ii. ☐ Paper
- c. ☐ Statement(s) Verifying Identical Paper and Computer Readable Copy

**Accompanying Application Parts**

9. ☐ Assignment Papers *(cover sheet & document(s))*
10. ☐ 37 CFR 3.73(B) Statement *(when there is an assignee)*
11. ☐ English Translation Document *(if applicable)*
12. ☐ Information Disclosure Statement/PTO-1449                      ☐ Copies of IDS Citations
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503) *(Should be specifically itemized)*
15. ☐ Certified Copy of Priority Document(s) *(if foreign priority is claimed)*
16. ☒ Certificate of Mailing
- ☐ First Class    ☒ Express Mail *(Specify Label No.):* EV 302 232 204 US

*(Only for new nonprovisional applications under 37 CFR 1.53(b))*

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4

17. ☐ Additional Enclosures (*please identify below*):

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## P01ULRG/REV06

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**Fee Calculation and Transmittal**

**CLAIMS AS FILED**

For	#Filed	#Allowed	#Extra	Rate	Fee
Total Claims	21	- 20 =	1	x \$18.00	\$18.00
Indep. Claims	3	- 3 =	0	x \$84.00	\$0.00
Multipl D pendent Claims (check if applicable) <input type="checkbox"/>					\$0.00
BASIC FEE					\$750.00
OTHER FEE (specify purpose) _____					\$0.00
TOTAL FILING FEE					\$0.00

- ☐ A check in the amount of \_\_\_\_\_ to cover the filing fee is enclosed.
- ☒ The Director is hereby authorized to charge and credit Deposit Account No. 23-3178 as described below.
- ☐ Charge the amount of \_\_\_\_\_ as filing fee.
- ☒ Credit any overpayment.
- ☒ Charge any additional filing fees required under 37 C.F.R. 1.16 and 1.17.
- ☐ Charge the issue fee set in 37 C.F.R. 1.18 at the mailing of the Notice of Allowance, pursuant to 37 C.F.R. 1.311(b).

  
Signature

FRASER D. ROY  
Registration No. 45,666

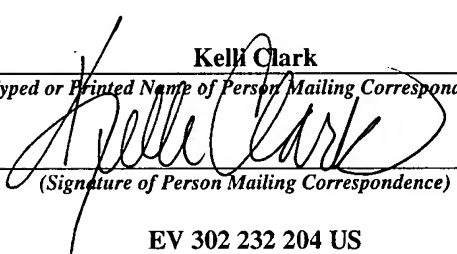
Dated: July 21, 2003



**022913**

CC:

PATENT TRADEMARK OFFICE

<b>CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)</b> Applicant(s): Yonglin Huang et al.			Docket No. 15436.103.1
Serial No. Unassigned	Filing Date 07/21/2003	Examiner Unassigned	Group Art Unit Unassigned
Invention: <b>PLUG-IN MODULE FOR PROVIDING BI-DIRECTIONAL DATA TRANSMISSION</b>			
<p>I hereby certify that the following correspondence:</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"><b>Transmittal Letter (4 pgs, in triplicate); United States Patent Application (48 pgs); Formal Drawings (11 sheets); and Certificate of Express Mailing Label No. EV 302 232 204 US.</b></div> <p style="text-align: center;"><i>(Identify type of correspondence)</i></p> <p>is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on</p> <p style="text-align: center;"><u>July 21, 2003</u> <i>(Date)</i></p> <div style="text-align: center; margin-top: 20px;"><div style="display: inline-block; text-align: left; width: 40%;">Kelli Clark <i>(Typed or Printed Name of Person Mailing Correspondence)</i></div><div style="display: inline-block; text-align: center; width: 60%;"> <i>(Signature of Person Mailing Correspondence)</i></div></div> <div style="text-align: center; margin-top: 10px;"><u>EV 302 232 204 US</u> <i>("Express Mail" Mailing Label Number)</i></div>			
<b>Note: Each paper must have its own certificate of mailing.</b>			